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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/682,481	10/10/2003	Jang-Hyoun Youm	1572.1165	1459
21171 759	09/14/2005	•	EXAMINER	
STAAS & HA	LSEY LLP		DATSKOVSKIY	, MICHAEL V
SUITE 700 1201 NEW YORK AVENUE, N.W.			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			2835	

DATE MAILED: 09/14/200

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary    Total Content   Examiner   Nichael V. Datskovskiy   2835	•		Application No.	Applicant(s)				
Michael V. Datskovskiy   2835	Office Action Summary		10/682,481	YOUM ET AL.				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ③ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of the may be available under the provisions of JC RF 1.136b., in no event, towers, may any be themsy field  If NO period for regly is appelled above, the mainture statutory period will apply and will expire \$3.00 MONTHS from the mailing date of this communication. Feature to expend abandoor 10, 91.00 S. C. § 1, 130.  Any reply received by the Office later then from months after the mailing date of this communication, even if threely filled, may reduce any everred patern and interest. Set 3 *CFR 1.736b.  Status  1) □ Responsive to communication(s) filled on 10 October 2003.  2a) □ This action is FINAL.  2b) □ This action is finAL.  2b) □ This action is finAL.  2b) □ This action is finAL.  2c) □ Claim(s) 1.2d is/are pending in the application.  4a) □ The above claim(s) is/are withdrawn from consideration.  5c) □ Claim(s) 1.2d is/are allowed.  5c) □ Claim(s) 1.2d is/are allowed.  5c) □ Claim(s) 1.2d is/are allowed.  5c) □ Claim(s) 1.2d and 10 is/are objected to.  8c) □ Claim(s) 1.2d and 10 is/are objected to.  8c) □ Claim(s) 1.2d and 10 is/are objected to.  8c) □ Claim(s) 1.2d and 10 is/are objected to.  8c) □ Claim(s) 1.2d and 10 is/are objected to by the Examiner.  10) □ The specification is objected to by the Examiner.  10) □ The drawing(s) flied on 10 October 2003 is/are: all □ accepted or b) □ objected to by the Examiner.  10) □ T			Examiner	Art Unit				
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.13(6), in not event, however, may a legy be timely filed the provision of the provisio			Michael V. Datskovskiy	2835				
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Estatesions of am may be available under the proteins of 37 CF1 1350, in no event, howers, may a retyle be finely fired after 53k (6) MONTHS from the malities date of his communication. If the protein or may be applied and the fire of the communication of the proteins of the protei								
1) Responsive to communication(s) filed on 10 October 2003. 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☑ Claim(s) 1-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) is/are allowed. 6) ☑ Claim(s) 1-9-20 and 22-24 is/are rejected. 7) ☑ Claim(s) 2-8 and 10 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.  Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 10 October 2003 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☑ Certified copies of the priority documents have been received. 2 ☐ Certified copies of the priority documents have been received in Application No 3 ☐ Copies of the certified copies of the priority documents have been received in Interview Summany (PTO-413) application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.	WHIC - Exte after - If NC - Failu Any	CHEVER IS LONGER, FROM THE MAILING DA nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period vere to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONEI	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 9, 11-20 and 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Hirano et al.

Hirano et al teach heat dissipation system, Fig. 12, for a semiconductor device having a plurality of semiconductor chips 23, 24, comprising:

a heat dissipation member 11 to cool the one or more semiconductor chip 23; an exterior heat dissipation member 13, which is provided opposite to the heat dissipation

member 11, engaged to the semiconductor device 23 and connected to a potential of the heat dissipation system; an electrical conductor member 14 which is

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provided between the heat dissipation member 11 and the exterior heat dissipation member 13, and electrically connects the heat dissipation member 11 and the exterior heat dissipation member 13 to each other; and a thermal conductivity insulating member 12 which is inserted between the heat dissipation member 11 and the exterior heat dissipation member 13. Hirano et al teach furthermore: the heat dissipation system, wherein the potential is an electrical ground; the semiconductor device is a semiconductor power device; and the semiconductor power device 23 is an active power switching device. Hirano et al also teach: said heat dissipation member 11 and the exterior heat dissipation member 13 are made of a metal having a high thermal conductivity; the electrical conductor member and the thermally conductive insulating member increase a heat dissipation efficiency of the semiconductor device so as to control noise. Hirano et al teach furthermore: said electrical conductor member 14 is a projection part which contacts the heat dissipation member 11 and the exterior heat dissipation member 13, wherein .the electrical conductor member removes a parasitic capacitance between the heat dissipation member 11 and the exterior heat dissipation member 13 so as to increase a resistance against noise.

## Allowable Subject Matter

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- 3. Claims 2-8, 10 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 4. The following is a statement of reasons for the indication of allowable subject matter: The electric conductor member comprises a thin film layer (claims 2-8, 10);

The electrical conductor member further includes a projection part, which contacts at least one of the heat dissipation member and the exterior heat dissipation member (claim 21).

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weber et al (US Patent 6,226,183) applicable for the rejection of the claims 1, 9, 11-19 and 22-24, and Smith (US Patent 5,459,348); Yoshimatsu et al (US Patent 6,509,629) and Panella et al (US Patent 6,853,559).
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Datskovskiy whose telephone number is (571) 272-2040. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Just Butsley

Michael V Datskovskiy Primary Examiner Art Unit 2835

09/12/2005